

Remarks

In this discussion set forth below, Applicant does not acquiesce to any rejection or averment in this Office Action unless Applicant expressly indicates otherwise.

The non-final Office Action dated March 10, 2008, lists the following rejection: claims 1-13 stand rejected under 35 U.S.C. § 102(b) over Munari *et al.* (“A Test Pattern for Three-Dimensional Latch-up Analysis”). Reconsideration and allowance of the claims is requested in light of the arguments presented below.

Applicant respectfully traverses the § 102(b) rejection of claims 1-13 because the cited portions of the Munari reference do not correspond to numerous aspects of the claimed invention. The Office Action cites to various portions of Munari; however, these portions are not arranged as required by the claimed invention. According to M.P.E.P. § 2131, the elements of a prior art reference must be arranged as required by a claim in order to anticipate the claim. As a first example (regarding claims 1-13), the claimed invention requires that each of the plurality of test blocks include an injector block. The Office Action asserts that source-measurement units of HP-4145B semiconductor parameter analyzer (*see, e.g.*, page 106, col. 2, last paragraph) correspond to the claimed test blocks and that Munari’s injecting device (*see, e.g.*, page 107, col. 1, first paragraph) corresponds to the claimed injector blocks. The cited portions of Munari, however, do not teach that the injecting device is part of the source-measurement units of the HP analyzer. Specifically, Munari teaches that the injecting device (*e.g.*, a pnp transistor) injects current to trigger latch-up of the triggering device (*e.g.*, a npn transistor) (*i.e.*, the injecting device and the triggering device form the parasitic device that is being tested). *See, e.g.*, page 107, col. 1, first paragraph and page 107, col. 2, second full paragraph. Thus, Munari’s injecting device (*i.e.*, the Office Action’s alleged injector block) is not part of the source-measurement units of the HP analyzer (*i.e.*, the Office Action’s alleged test blocks); as such, the cited portions of the Munari reference are not arranged as required by the claimed invention.

As a second example (regarding claims 1-13), the claimed invention requires that the plurality of test blocks are connected in parallel. The cited portions of Munari, however, do not mention that source-measurement units of HP-4145B semiconductor

parameter analyzer (*i.e.*, the Office Action's alleged test blocks) are connected in parallel. Thus, the cited portions of Munari do not correspond to the claimed invention.

As a third example (regarding claims 1-13), the claimed invention includes a plurality of sensor blocks, each of which has a PNP latch-up test structure. The Office Action asserts that Munari's parasitic device (*see, e.g.*, page 104, col. 1) corresponds to the claimed sensor blocks. The cited portions of Munari, however, teach that the injecting device (*i.e.*, the Office Action's alleged injector block) is part of the parasitic device being tested as discussed above. *See, e.g.*, page 107, col. 1, first paragraph and page 107, col. 2, second full paragraph. Thus, the cited portions of Munari do not teach an injector block and a separate sensor block (which includes a PNP latch-up test structure) as required by the claimed invention. As such, the cited portions of the Munari reference are not arranged as required by the claimed invention.

As a fourth example (regarding claims 1-13), the claimed invention requires that the plurality of sensor blocks are located at successively increasing distances from the respective injector block. The cited portions of Munari, however, do not mention that the parasitic devices (*i.e.*, the Office Action's alleged sensor blocks) are located at successively increasing distances from the respective injecting devices (*i.e.*, the Office Action's alleged injector blocks). Thus, the cited portions of Munari do not correspond to the claimed invention.

In view of the above, the cited portions of the Munari reference fail to correspond to numerous aspects of the claimed invention. Accordingly, the § 102(b) rejection of claims 1-13 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 102(b) rejection of claims 3 and 4 because the cited portions of Munari do not correspond to aspects of the claimed invention directed to the injector blocks being connected between first and second supply lines (claim 3), and the sensor blocks being connected between third and fourth supply lines that are different from the first and second supply lines (claim 4). The Office Action simply cites to several columns of Munari without identifying what elements of Munari correspond to the claimed supply lines (*e.g.*, page 104, col. 2; page 105, col. 1; page 106, col. 2; and page 107, col. 1). Applicant reviewed these portions of Munari; however, these portions do not mention injector blocks and sensor blocks connected between different supply

lines as in the claimed invention. Accordingly, the § 102(b) rejection of claims 3 and 4 is improper and Applicant requests that it be withdrawn. Should any rejection based on the Munari reference be maintained, Applicant requests that the Examiner specifically identify where and how Munari provides support of the Office Action's assertion of correspondence to the various aspects of claims 3 and 4.

Applicant further traverses the § 102(b) rejection of claim 9 because the cited portions of Munari do not correspond to aspects of the claimed invention directed to disconnecting the sensor blocks during application of the stress current (or voltage) to the injector blocks. Applicant notes that the Office Action simply cites to several pages of Munari (*i.e.*, pages 105-107) without providing any indication regarding how these pages support the Office Action's assertion that Munari teaches these aspects of the claimed invention. As discussed above, the cited portions of Munari teach that the injecting device (*e.g.*, a pnp transistor) injects current to trigger latch-up of the triggering device (*e.g.*, a npn transistor). *See, e.g.*, page 107, col. 1, first paragraph and page 107, col. 2, second full paragraph. Applicant submits that the cited portions of Munari do not teach disconnecting the injecting device in any manner during application of the current to the triggering device. Accordingly, the § 102(b) rejection of claim 9 is improper and Applicant requests that it be withdrawn. Should any rejection based on the Munari reference be maintained, Applicant requests that the Examiner specifically identify where and how Munari provides support of the Office Action's assertion of correspondence to the various aspects of claim 9.

Applicant notes that minor amendments have been made to claims 4 and 6-7 to improve readability. These amendments are not being made to overcome the rejections of these claims raised by the Office Action, which fail for at least the reasons discussed above.

Applicant has also added new claims 14-19. Applicant submits that claims 14-19 are allowable over the Munari reference for at least the reasons discussed above relating to the impropriety of the § 102(b) rejection of claims 1-13.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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